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Mitsubishi Subsidiary Seeks to Build Nevada Plant

LCG, Mar. 4, 2002--Diamond Generating, a subsidiary of Mitsubishi, the Japanese conglomerate, hopes to build a gas-fired generating plant near Goodsprings, Nevada, starting in early 2003.

While many US-based power developers have scaled back the number of projects they are actively pursuing due to a drop in power prices and lender concerns over some power producers' high levels of debt, Bill Davis, director of development of Diamond Generating, said, "there is still an increase in electric load requirements (in the western United States)." The plant would be named Ivanpah Energy Center, and would have a capacity of 500 megawatts.

The plant, which would be dry-cooled, would utilize 30 to 50 acre-feet of water for cooling annually, from partially treated gray water generated by the Southern Desert Correctional Center in Jean. A typical dry-cooled plant requires 250 to 300 acre feet. The land on which Ivanpah would be built would be leased from the Bureau of Land Management.

A series of public meetings are scheduled concerning the plant. If the plant receives all required approvals, Diamond hopes to start operations by March 2005.

News Headlines

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The Center for Environmental Law & Policy's

Columbia River Vision

Strong and Sustainable Management of Washington's Waters

November 2000



CELP's Columbia River Vision

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The Water Withdrawal & Diversion Dilemma

The Washington State Department of Ecology (Ecology) just came perilously close to permitting a large water diversion that would have allowed the Cities of Kennewick, Pasco, Richland, and West Richland (the "Quad Cities") the right to take 178 cubic feet per second (cfs), or 115 million gallons of water per day (mgd), out of the mainstem of the Columbia River. The river is already over-appropriated for consumptive water use, and not enough water remains instream to meet fish-critical needs. While federal agencies, the State of Idaho, and individual family farmers and water users have been working to augment flows, the State of Washington sits ready to permit further water use—another 100+ applications for new water from the Columbia are pending before Ecology right now.

With commitments made to salmon restoration in this state, Washington needs to reconsider its position on allowing further consumptive diversions and withdrawals from the Columbia River, and close the Columbia to further appropriation. The State should be working collaboratively with other entities in assessing the flow needs of listed salmon species, and in trying to augment flows to ensure that these needs are met. This state can ensure water for both people and fish if it works more creatively around commitments to restore and preserve the resources under its stewardship.

CELP's Concern¹

Many of Washington's streams, rivers, and aquifers are currently over-appropriated and lack sufficient flows to meet the needs of fish. The Columbia River represents just one of these over-appropriated river systems. The Center for Environmental Law & Policy (CELP) became concerned with the potential for decreased Columbia River flows in 1997, when the Washington State legislature lifted a permitting moratorium and paved the way for the State to permit further water use from the Columbia.

CELP is particularly concerned with the precedent the State will be setting by proceeding with water permitting on the Columbia. At a time when the federal government, tribes, scientists,

¹CELP questioned Ecology's authority to permit additional withdrawals from the Columbia in relation to the Quad Cities application. Along with pointing out concerns over the cumulative effects of water withdrawals and diversions, CELP also pointed out that the application itself was technically invalid. Ecology had actually cancelled the application years earlier when the Quad Cities failed to live up to the terms of their preliminary permit. Despite the fact that numerous substantive reasons existed for Ecology to deny this application, the agency hung its hat on this

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environmentalists and others agree that salmon recovery must include increased flows for fish, the State of Washington sits ready to unilaterally spawn a significant snag in coordinated Columbia River salmon recovery efforts. In doing so, the State will be ignoring its responsibilities as a steward of a public resource, as well as a governmental entity that must ensure its actions do not further the decline of threatened and endangered species.

CELP believes the State can be a "better actor" by halting any further Columbia diversions and withdrawals, and implementing more creative solutions to find water for both people and fish. CELP's Columbia River Vision: Strong and Sustainable Management of Washington's Waters, including an overview of the state of the Columbia River and the State's water permitting role, follows:

The Columbia River's Decline

All Columbia River Basin salmon stocks are in a state of perilous decline, especially Upper Columbia spring chinook and steelhead throughout its range. Without substantial intervention, there is a greater than 50:50 chance that most of these stocks will be extinct by the next century.²

The Flow Dilemma

The development and operation of the numerous dams on the Columbia and Snake Rivers historically has greatly impacted salmon survival:

Storage dams have eliminated spawning and rearing habitat and have altered the natural hydrograph of the Snake and Columbia rivers, decreasing spring and summer flows and increasing fall and winter flows. Power operations cause fluctuation in flow levels and river elevations, affecting fish movement through reservoirs and riparian ecology and stranding fish in shallow areas. The eight dams in the migration corridor of the Snake and Columbia rivers alter smolt and adult migrations. Smolts experience a high level of mortality passing through the dams. The dams also have converted the once-swift river into a series of slow-moving reservoirs, slowing the smolt's journey to the ocean and creating habitat for predators. Water velocities throughout the migration corridor are now far more dependent on volume runoff than before the development of the mainstem reservoirs.³

technicality and announced formally in June of this year it lacked authority to act on it. The Quad Cities subsequently filed suit against Ecology over this decision. At nearly the same time, the Columbia-Snake Irrigators' Association, a consortium of agri-business interests, sent Ecology a Notice of Intent to Sue, insisting that Ecology begin processing water permit applications on the John Day and McNary pools within 60 days. Certainly, this issue is a hotbed of competing political views. This White Paper advocates for sound management and legal principles to win out over such political pressures, to ensure strong and sustainable management of the State's waters.

²Conservation of Columbia Basin Fish: Draft Basin-Wide Salmon Recovery Strategy, vol. 1 at pg. 15 (Federal Caucus, 2000) (hereinafter "Federal Conservation Strategy").

³Draft Biological Opinion on Operation of the Federal Columbia River Power System at § 5.3.1 (NMFS, 2000) (hereinafter "2000 BiOP").

It seems the federal government is unwilling to commit to dam removal at this time, opting instead for improvements in dam operations with the aim of achieving a more normative river flow. Whether the dams are ultimately removed or remain in place, successful salmon recovery depends upon a sufficient quantity of water being available to flow down the Columbia and Snake Rivers. Water quantity problems affect water temperatures, smolt travel time, and sedimentation rates—key parameters that greatly impact salmon survival and recovery.⁴

As the agency responsible for salmon recovery in the Columbia and Snake Basins, the National Marine Fisheries Service (NMFS) released a Biological Opinion in 1995 on operation of the federal hydropower system.⁵ In its '95 BiOP, NMFS concluded that proposed operation of the federal hydropower system was likely to jeopardize the continued existence of listed salmon, and identified immediate, intermediate, and long-term actions to avoid jeopardy.⁶ The first immediate action involved increasing flows in the Columbia and Snake Rivers, with the goal of meeting target flows that NMFS developed.⁷ The target flows that apply for the Snake and Columbia Rivers are as follows:⁸

	Lower Granite Dam (Snake River)	McNary Dam (Columbia River)
SPRING	85,000-100,000 cfs	220,000-260,000 cfs
SUMMER	50,000-55,000 cfs	200,000 cfs

Flow augmentation is already occurring—the U.S. Bureau of Reclamation (BOR) in conjunction with the State of Idaho and individual water users in Idaho have augmented flows by 427,000 acre-feet per year every year since 1993.⁹ However, despite efforts to meet targeted levels, the above salmon flow objectives have not been met over significant periods of time. In fact, under current river operating conditions "sufficient flows cannot generally be maintained to protect migrating juvenile salmon."¹⁰ Even in record-breaking water years, flows have continued to fall far short of targeted levels: Despite record high snowfall and resulting runoff volumes in 1997, for example, weekly flow objectives were not achieved in either the Snake or Columbia Rivers during most or all of August.¹¹

⁴Id. at § 5.3.2.

⁵Biological Opinion on Operation of the Federal Columbia River Hydropower System and Juvenile Transportation System in 1995 and Future Years (NMFS, 1995) (hereinafter "'95 BiOP").

⁶Id.

⁷Id. at 95-104.

⁸Id. at 104.

⁹2000 BiOP at § 3.2.2.6.

¹⁰See Letter from Howard Shaller, Project Leader, U.S. Fish and Wildlife Service, to David McDonald, City Planner, City of Pasco, Feb. 1, 2000.

¹¹See 1997 Fish Passage Center Annual Report at x.

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Measured flows failed to meet summer flow objectives at Lower Granite Dam:¹²

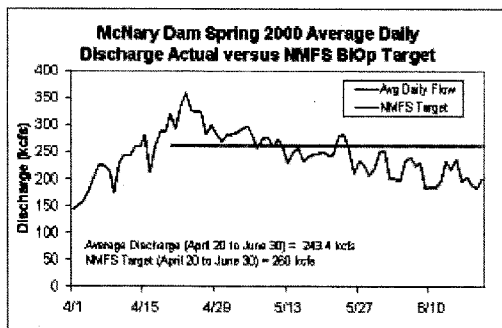
- Over 2/3rds of the time in 1999
- Nearly 1/2 of the time in 1998
- Over 1/3rd of the time in 1997
- Over 2/3rds of the time in 1996

At McNary Dam, measured summer flows fell short of target levels:

- Nearly 1/4th of the time in 1999
- Over 3/4ths of the time in 1998
- Over 1/4th of the time in 1997
- 2/5ths of the time in 1996

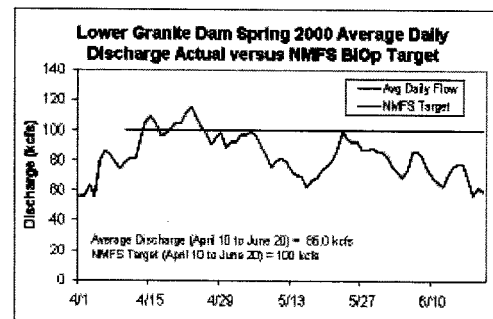
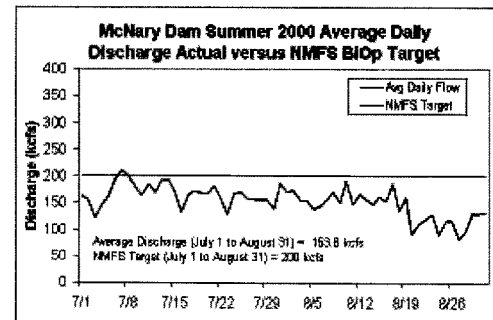
Target flows were not met on average at either McNary or Lower Granite Dams for both the spring and summer seasons of this year as well, as shown below.

Graphs below reflect low flow conditions in the Columbia and Snake Rivers for the Year 2000. As is evident, target flows were not met on average for both spring and summer.¹³

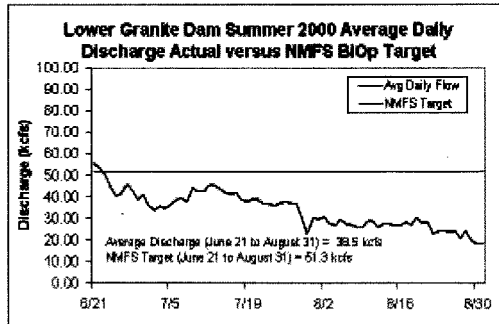


¹²See Memorandum in Support of Plaintiff's Motion for a Preliminary Injunction, or in the Alternative for Summary Judgment and a Permanent Injunction at 7 (May 18, 2000), *Trout Unlimited et al. v. NMFS et al.*, U.S. District Court (Or.), Civ. No. 00-262 MA.

¹³Graphs are courtesy of the Fish Passage Center, see *infra* note 16.



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The federal government's Year 2000 update to its plan for recovering salmon in the Columbia and Snake Rivers continues to place great importance on augmenting river flows to meet target levels.¹⁴ Under NMFS' directive, state, federal, and private players have already spent millions of dollars in efforts to augment flows. Yet these efforts are still falling far short from achieving salmon flow objectives. The federal government states that, in order to achieve a more normative river, "significant amounts of additional water targeted to enhance flows during fish migration are needed."¹⁵ As well, the Fish Passage Center¹⁶ estimates that additional augmentation flows beyond quantities currently provided are necessary to meet spring and summer target flows—on the order of another 1 to 1.5 million acre-feet per year.¹⁷

Current Water Rights: "That's a Lot of Water...."

As things stand today, state-permitted water use significantly reduces flows in the Columbia, affecting fish habitat and reducing fish production. A staggering amount of water is currently tied up in water right certificates and claims—mostly for irrigation which depletes river flows in months when water levels are already at their lowest. Alarming, the river's current flows also do not present an accurate baseline—a number of water permits have been granted by the State and flows will continue to decrease as permittees gradually use the full amount of their water rights. Granting any further withdrawals will just serve to exacerbate an already precarious situation.

¹⁴See 2000 BiOp.

¹⁵Federal Conservation Strategy, vol. 1 at pg. 79.

¹⁶The Fish Passage Center (FPC) is an entity created to provide fish passage management recommendations regarding spill, flow and fish facilities operations to the federal Fish and Wildlife Managers. See the FPC web site at www.fpc.org/index.htm.

¹⁷See Memo from Dusica Jevremovic, Fish Passage Center, to Michelle DeHart (Jan. 18, 2000).

As mentioned previously, water quantity problems greatly affect water quality—by affecting water temperatures, pollutant concentrations, and sedimentation rates.¹⁸ While much of the water used for irrigation is eventually returned to the river, still: (1) crops consume a large proportion of water used; (2) diversions and withdrawals remove water from the river and streams from May to September, and return flow is not only delayed but difficult to measure, and (3) return water carries with it pesticides and higher nutrient levels.¹⁹

The Bureau of Reclamation recently calculated the total amount of irrigation water rights²⁰ claimed or granted by the State to date.²¹ The figures are surprising to say the least: Over 200,000 cfs (or nearly 8 million acre-feet per year during the season from April to October) for both surface and groundwater irrigation rights have been granted above McNary Dam; and over 110,000 cfs (or roughly 4 million acre-feet per year during the season from April to October) for both surface and groundwater irrigation rights have been granted above Lower Granite Dam.²²

These water extractions collectively account for nearly 40% of the average natural Columbia River flow in low flow years at McNary Dam during the irrigation season.²³ Consequently, a staggering portion of the river is already being used under these certificated and claimed water rights. Perhaps most alarming—Ecology has also permitted roughly 150 water rights that are not reflected in these figures and remain partially "inchoate"—meaning that Ecology granted a water user the right to take a specified amount of water, but the user has yet to fully use or "perfect" the full amount of water granted. Some of these permits date back to the 1960's and a few of the permittees have failed to even begin the construction allowing them to appropriate their requested diversions. These permits collectively authorize extraction of over 1600 cfs from the Columbia, or roughly another 330,000 acre-feet per year on top of the amount already being used under the water rights discussed above.²⁴

The existence of these inchoate rights mean that the current flows in the Columbia, which are already below established flow targets for much of the fish-critical season, are a false baseline:

- Current flows in the Columbia River fail to reflect the large portion of water already permitted, but not fully put to use; and
- Columbia River flows will continue to decrease—even without the State permitting further water use.

¹⁸2000 BiOp at § 5.3.2.

¹⁹Id.

²⁰Claims and certificates.

²¹See Cumulative Hydrologic Impacts of Water Resource Development in the Columbia River Basin, Final Report Prepared by U.S. Bureau of Reclamation Pacific Northwest Region for National Marine Fisheries Service at Appendix B ("Summation of Water Rights and Withdrawals Above Lower Granite and Above McNary Dam") (June 1999) (hereinafter referred to as "the BOR Cumulative Effects Report"). The BOR used 1994 data on state water rights to do these calculations. The calculations represent the amounts granted on certificates, and the amounts stated on water right claims.

²²Id.

²³See Biological Opinion on Inland Land, Inc. at ii (NMFS, 1997) (hereinafter "NMFS Inland Land Opinion"), summarizing findings from the BOR Cumulative Effects Report.

²⁴See Appendix A. This figure includes consumptive uses only. Permits under which a permittee has already filed a proof of appropriation were excluded. Consequently, this figure represents the total amount of water that has been permitted for consumptive use, but not yet fully perfected.

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Moreover, the total amount of water requested in applications currently pending before Ecology represents another 900 cfs.²⁵ Many of these applications were filed during the permitting moratorium: Were Ecology to begin approving applications for new water, many more applications would very likely be filed. Each individual diversion request may seem like a drop in the bucket when compared to the great flow of the Columbia. Yet considering the unbelievably large portion of the river that has already been appropriated one diversion at a time, coupled with the inability of the river to meet flows necessary for fish—it becomes painstakingly obvious that the river is already over-appropriated.

Too much of the natural flow of the Snake and Columbia Rivers is already tied up in state-certificated water rights, permits and claims. Allowing subsequent diversions will only hinder the State's ability to meet flow objectives in the future. As discussed below, the State is governed by an obligation to ensure that management of public waters serves to protect river, stream, and aquifers at levels necessary for the health of fish and wildlife: Ecology should be working to meet flow objectives, not hinder others' efforts along these lines while simultaneously increasing the difficulty of meeting flow objectives in the future.

Common Sense and The Law

Ecology's position in planning to permit further Columbia withdrawals is inconsistent with the State's commitment to help restore salmon, and thwarts the numerous and ongoing efforts underway to augment flows. The State has both responsibilities under the Water Code and under commitments made to the public and other jurisdictions to promote salmon recovery.

Common Sense

Ecology really must work collaboratively with other state and federal entities to protect Washington's waters. The Snake and Columbia Rivers traverse both state and international boundaries, and provide habitat for numerous ESA-listed species.²⁶ Collaborative efforts do not entail federal supremacy or an abdication of state authority, but instead a recognition that the waters of the state must be sustainably managed, coupled with a commitment to do so.

Unfortunately, permitting further water use from the Columbia River will counter numerous ongoing salmon recovery efforts. Specifically, permitting further diversions and withdrawals in Washington will directly counter the following salmon recovery efforts:²⁷

Federal, State, Tribal and Individual Water Users' Efforts to Augment Flows:

- The BOR has been providing, and proposes to continue providing, 427,000 acre-feet of water per year from the Upper Snake River Basin to benefit flow conditions during

²⁵See Appendix B. This figure represents all consumptive uses that would impact flows.

²⁶Endangered Species Act, 16 U.S.C. § 1531 et seq.

²⁷These actions are examples of major initiatives that will be counteracted by further Washington State permitting activities on the Columbia and Snake Rivers. The lists are not exhaustive.

the salmon migration season from April through August (termed "flow augmentation").²⁸

- "To provide this water, the BOR has reacquired some 60,000 acre-feet of reservoir storage space in its Upper Snake River basin reservoirs and has assigned about 100,000 acre-feet of previously unassigned space to flow augmentation. The BOR has also leased 38,000 acre-feet of storage space in Palisades Reservoir as part of a 5-year agreement with the Shoshone Bannock Tribes of the Fort Hall Indian Reservation and has acquired 17,650 acre-feet of natural flow rights in Oregon for flow augmentation. The BOR proposes to acquire any remaining water needed to meet the 427 kaf goal from willing lessors in Idaho's water banks. Using this strategy, the BOR has successfully provided about 427 kaf annually from upper Snake River basin reservoirs and natural flow rights since 1993."²⁹

- The State of Idaho enacted legislation specifically designed to grant the BOR access to Idaho's water banks.³⁰ This means that Idaho irrigators—individual family farmers, ranchers and water users—are choosing to sell or lease their rights to improve flow conditions downstream.

- The Idaho State Department of Water Resources instituted a moratorium against further consumptive withdrawals from the Snake River Basin.³¹

- The BOR is also purchasing water rights from individual farmers, ranchers, and water users in the Yakima Basin in order to enhance flows for fish in the Yakima River—a major tributary to the Columbia.

International Agreement(s) to Augment Flows:

- Under the Columbia River Treaty and Non Treaty Storage Agreements, Canada (B.C. Hydro) stores and releases 1 million acre-feet of water per year to improve the likelihood of achieving salmon flow objectives in the mainstem Columbia.³²

The State's Own Salmon Recovery Initiatives:

- The Washington State Legislature set up the Governor's Salmon Recovery Office in 1998, to support Governor Locke's Joint Natural Resources Cabinet in shaping a statewide strategy to recover salmon.³³

²⁸See 2000 BiOP at § 3.2.2.6.

²⁹*Id.*

³⁰See Idaho Code § 42-1763B

³¹This moratorium basically applies to the Snake River Basin from the Eastern boundary of the Snake River to the King Hill gauging station, and from the King Hill station to the Western border. Information gained from Pam Scaggs, Idaho Department of Water Resources, Oct. 20, 2000.

³²See 2000 BiOP at § 3.2.2.7.

³³See The Salmon Recovery Home Page at www.governor.wa.gov/esa/index.htm.

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- The Joint Natural Resources Cabinet subsequently released a Statewide Strategy to Recover Salmon in 1999.³⁴ This Statewide Strategy recognizes that:

Lack of stream flow to sustain healthy production levels is a key factor contributing to the poor status of wild fish stocks. Streams and rivers in several basins used by salmon are over-appropriated, meaning more water is being withdrawn for uses such as irrigation, when flows are naturally low and when fish need water.³⁵

To address these flow problems, the State plans to focus on restoring flows and putting water back instream for fish. The State plans to do this by:

- Halting the issuance of any new water rights until instream flows can be set for priority watersheds;
- Making flow restoration the primary objective in watersheds where existing uses diminish flows for fish; and
- Aggressively pursuing opportunities to use public funds to lease or purchase senior water rights to put water back instream for fish.³⁶

Permitting further withdrawals will also run directly counter to the State's obligations under the State Water Code, Chapter 90.03 RCW, and other applicable law:

State Water Law

Ecology is governed by many different directives in managing water use in the state. It is the stated policy of the State, for example, to promote use of water while at the same time ensuring that enough water is retained instream to protect natural rights and values.³⁷ Under a separate legislatively-declared fundamental, Ecology must protect the quality of the natural environment and work to enhance it, by ensuring adequate stream flows for fish, wildlife and other environmental values, and by ensuring high water quality.³⁸ Further mandates require Ecology to consider public interest concerns more specifically: Ecology must, for example, reject a water right if it proves detrimental to the public interest.³⁹ This "public interest" language obligates Ecology to protect the natural environment, and to consider the needs of threatened and endangered species.

³⁴Extinction Is Not An Option: Statewide Strategy to Recover Salmon, Washington State Joint Natural Resources Cabinet (1999) (The State's stated objective is to "[r]estore salmon, steelhead, and trout populations to healthy and harvestable levels and improve the habitats on which fish rely." The Strategy was designed as a long-term vision or guide for salmon recovery in Washington.)

³⁵*Id.*

³⁶*Id.*

³⁷RCW 90.03.005.

³⁸RCW 90.54.020 ("Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish.....and other environmental values"; "Waters of the state shall be of high quality.").

³⁹RCW 90.03.290.

Consequently, in granting any water rights request, Ecology must ensure that (1) the requested use of water is for a beneficial purpose; (2) there is water available to satisfy the request; (3) the available water will not impair existing rights; and (4) granting the permit will not be detrimental to the public interest.⁴⁰

Ecology cannot meet these mandates if it permits further water use from the Columbia River, however. Flows are already insufficient to ensure salmon survival and recovery. Considering the fact that federal, state, and private entities are working to augment flows to meet flow objectives, the obvious conclusion is:

Water is simply not available for further appropriation. Allowing further extractions based on the concept that each by itself has an immeasurable effect is also against the public interest. Ecology lacks the vital information on water use and the cumulative impact of current and future diversions and withdrawals to permit any further water extraction from the Columbia River.

Lack of Vital Information on Water Use and Cumulative Effects

Ecology is required under a 1993 law to meter all water use from rivers with depressed salmon stocks.⁴¹ This includes both new and previously existing water rights and claims.⁴² Drafted as part of a larger salmon recovery package, the statute logically recognizes that the first step in water management is to know how much water is being used and by whom.

Without this basic information, it is difficult or even impossible to assess the cumulative impacts of water use on river flows, and to gauge whether further extractions would exacerbate flow problems. Ecology must consider cumulative impacts in light of all planned or reasonably foreseeable future actions, prior to granting any new water rights.⁴³ Consequently, Ecology must understand and consider not only the cumulative effects of current water use, but the likely cumulative effects of future water demand on the quality and quantity of flows in the Columbia and Snake Rivers as well.

⁴⁰*Id.*

⁴¹RCW 90.03.360.

⁴²*Id.*

⁴³*Okanogan Highlands Alliance et al. v. Department of Ecology*, PCHB Nos. 97-146, 97-182, 97-183, 97-186, 99-019, Finding of Fact #24, 2000 WL 46743 (Jan. 19, 2000); *See also Fleming et al. v. Department of Ecology*, PCHB Nos. 93-320, 94-7, 94-11, 1994 WL 905610 at *5 (1994) ("The public interest includes an examination of the net benefits from diversionary uses and retention of waters within streams. In this regard consideration should be given to the cumulative impact of similar requests that might be made in the future.")

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Ecology failed to implement required metering under this 1993 law, however, and currently does not meaningfully monitor (meter) water use under existing water rights in the Columbia Basin.⁴⁴ Ecology also has not completed any studies to assess the cumulative impacts from either current water extraction or foreseeable future water extraction in the Columbia and Snake Basins. Consequently, Ecology does not know the extent of actual water use impacting the Columbia and Snake Rivers, and cannot sufficiently assess the cumulative impacts of state-permitted water diversions and withdrawals on river flows.

While the Quad Cities pointed out that the impact of their diversion would only reduce the river by less than one inch over a 30 year period, and decrease smolt survival by only .0002 to .003 percent⁴⁵—this application was just one of more than 100 applications pending before Ecology for Columbia River water. Were Ecology to justify approving any of the 100+ requests based on an assertion that each water extraction in itself will have only a small effect on river flow, water use could be permitted right to the point where the river runs dry. As Ecology staff outlined in an internal e-mail, "[t]he concept of 'measurable' effects is a red herring...because under the shield of that argument we could permit an infinite number of 'unmeasurable' depletions to dry up the river, having never had a 'measurable' effect on the (consequently extinct) fish."⁴⁶ Also, NMFS points out that "[a]s the interior Columbia Basin grows and develops it is foreseeable that demand for water will continue to grow as well...to allow additional future withdrawals to proceed, on the logic that each one by itself has a small impact, would undermine one of the major improvements in habitat conditions and further degrade the environmental baseline."⁴⁷

State law provides that the waters of the state are owned by the people of the state, and managed for the people by the state.⁴⁸ As mentioned above, Ecology, as the agency entrusted with managing the state's water resources, must protect the quality of the natural environment and, where possible, work to enhance it by ensuring adequate stream flows and water quality for fish and wildlife.⁴⁹ With little-to-no information gathered as to the extent of state-permitted

⁴⁴Indeed – state-wide. Ecology's failure to implement this statute was recently challenged by CELP and other groups: Thurston County Superior Court Judge Richard Hicks, in a February ruling of this year, stated that metering "is a necessary step to bring us out of the dark and into the light" as the state deals with managing "this most precious resource." Judge Hicks denied a motion by the Department of Ecology to dismiss claims by CELP and other groups that Ecology failed to properly implement the metering statute, and found that Ecology violated the statute by failing to require the metering of new and existing surface water rights. Judge Hicks also granted partial summary judgment in favor of the environmental groups ruling that existing groundwater rights must be metered where salmon are at risk, and scheduled a fact finding hearing to determine whether Ecology must give priority to water metering work. *American Rivers et al. v. Department of Ecology*, Thurston County Superior Court No. 99-2-00480-6.

⁴⁵See Supplemental Final Environmental Impact Statement, Diversion of Water from the Columbia River by the Cities of Kennewick, Pasco, Richland, and West Richland (June 2000).

⁴⁶See E-mail from Ken Slattery, Department of Ecology, to Keith Phillips, Water Resources Program Manager, Department of Ecology, Sept. 8, 1999.

⁴⁷NMFS Inland Land BiOP at 13.

⁴⁸RCW 90.03.010.

⁴⁹RCW 90.03.005; RCW 90.04.020.

water use, and consequently no meaningful understanding of the cumulative impacts of water use on river flows, Ecology possesses insufficient information to continue to permit further water extraction from the Columbia River—a river with poor flows that harbors numerous ESA-listed species.

As well, permitting further water use would be inconsistent with Ecology's own internal policies and legislative funding directives:

Ecology's Inconsistent Positioning

Ecology recently presented a "Vision" outlining the agency's plans for future management of the state's waters.⁵⁰ As one integral part of this Vision, Ecology intends to assess the needs of the natural resource base, including flows necessary for fish and wildlife, and ensure that these needs are satisfied. Notwithstanding this common sense approach, Ecology is about to quash its own Vision by permitting more water use from a river system unable to meet flows necessary to protect fish and wildlife.

Ecology's internal policies illustrate the agency's management inconsistencies: Under one particular policy, Ecology is funded for and initiating a pilot program to buy "Water for Fish."⁵¹ The legislature provided Ecology with \$1 million in the 1999 legislative session to fund a program to purchase or lease water rights—specifically so that Ecology could preserve and enhance flows in areas where not enough water exists to satisfy the needs of fish.⁵² Ecology instituted a policy the year before this, however, detailing a plan to assist people applying for a water right *in finding water*.⁵³ Ecology is also developing a plan *right now*, specific to the Columbia Basin, in which Ecology plans to aid applicants seeking Columbia River water in finding marketable and senior water rights that can be transferred for mitigation purposes ancillary to extracting more water from the river.⁵⁴

Since the Columbia is currently not meeting target flows at critical times of the year, the resource base is certainly not being "satisfied." Also, this lack of satisfaction is expounded by the fact that a portion of the current flow of the river will continue to decrease as permit holders perfect their water rights. The Columbia River, consequently, is already over-appropriated. To achieve its vision of "satisfying the natural resource base" and responsibly managing the river, Ecology should be trying to obtain water rights for transfer to instream use, with the goal of meeting flows for fish. Conceivably, however, an applicant seeking water from the Columbia could actively pursue, and with Ecology's aid, find marketable water rights

⁵⁰This vision statement was presented to CELP by Keith Phillips, Water Resources Program Manager, Department of Ecology, in 1999. See also Ecology's website at www.ecy.wa.gov/programs/wr/plan/vis-stat.html.

⁵¹See Focus: Buying Water for Fish – Pilot Program, on Ecology's website at www.ecy.wa.gov/biblio/0011003.html

⁵²*Id.*

⁵³See Department of Ecology Water Resources Program Policy 1010 (POL-1010) (1998).

⁵⁴Information gained from a meeting with Tom Fitzsimmons, Director, Department of Ecology, August 28, 2000.

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for use as mitigation that would allow the applicant to pull more water from the river. Ecology's aid would be as facilitator—funneling senior, valid water rights *towards* applicants seeking new water, and *away from* opportunities to increase flows to achieve target levels. The following bullet points clearly and succinctly lay out Ecology's management inconsistencies:

- Ecology plans to start processing applications for new water from the Columbia. The agency plans to allow applicants to take more water out of the mainstem even when the river is running too low to meet target flows set for fish.⁵⁵
- Ecology plans to help applicant's find marketable water rights to buy and use as mitigation water to offset impacts from new diversions.⁵⁶ While we applaud efforts to mitigate such impacts, Ecology should be ensuring flows are met prior to becoming a water broker for private interests.
- Ecology is actually funded by the Legislature (\$1 million) to find salable water rights in fish critical basins and put the water back instream. Yet, as noted above, they are now planning on funneling these same rights to water users to allow for more water extraction.

So this all begs the question:

Is Ecology, and indeed the State of Washington, committed to its stated Vision of satisfying flows for fish? Will Ecology responsibly manage the State's waters so that permitted use of rivers is sensible and sustainable? Or will Ecology help promote further water use at a time when information is lacking and flows are already too low to even sustain current salmon populations, let alone healthy populations?

WHAT NEEDS TO BE DONE:

Closing the Columbia to further diversions and withdrawals is a necessary first step toward ensuring the State does not further exacerbate an already-precarious situation.

The Columbia River is already over-appropriated. The State needs to stop, assess the situation and the needs of the resource, and then figure out sustainable and innovative ways to find water for people while saving enough water for fish.

⁵⁵d.
⁵⁶d.

How to Find More Water for People and Still Save Enough Water for Fish

Roughly 3 million people live in the Columbia Basin, and by the year 2040 this figure is projected to double to 6 million.⁵⁷ This burgeoning population growth clearly presents a daunting challenge to municipalities and others that must plan ahead to ensure adequate supplies of potable water and resources will be available for twice as many people as exist today. We understand the concerns of those planning for such immense growth in their jurisdictions. But we also feel that the traditional approaches of planning for growth have not been good enough to find water for people while simultaneously saving enough water for fish. Growth cannot continue to occur unchecked, and we need to carefully plan our communities and the impacts from those communities well into the future, keeping an open mind to new solutions that can preserve the resources we depend upon. Changes in fundamental concepts relating to water use and water supply can provide innovative solutions to finding water for both people and fish.

Stepping Outside of the Box:

The cost of water will begin to reflect its scarcity. Once we decide what limits exist to increasing water extraction from the Columbia Basin, we may not only realize we are unable to find more water to divert and withdraw—but that we need to backpedal in order to protect the Basin's water budget at levels which protect the resource overall. Water use in the state has been a free enterprise up until recently: The only fee involved for gaining a water right has been a filing fee paid to the Department of Ecology. As we are realizing the natural limitations of water basins to provide water for people while simultaneously maintaining functionality for fish and other wildlife, we are starting to see rising costs associated with increased water use. Applicants for new water in water-limited basins must now spend money seeking out and paying for existing water rights—to fulfill their needs either by transferring the rights to cover their intended uses, or to serve as mitigation water for proposals to appropriate new water from a given source. These salable rights are becoming, or are soon to become, a hot commodity—and the price of such senior, valid water rights will begin to increase with scarcity. What will be the price of the last salable right, after all other salable rights that fit demand/supply conditions are sold? How much will it be worth to find new water fifty years from now, when people have paid increasingly large sums of money to find salable rights right up until the point where the price of the next salable right is not worth the contemplated exchange for a new use?

While promoting the sale and transfer of existing rights over the granting of new water rights presents one solution, this solution cannot solve all water supply problems and thus cannot exist in a vacuum. We need to create innovative efforts in water conservation and water management that can directionally change our concepts of water use into this next millenium.

⁵⁷ *Big River News* at 3 (Natural Resources Law Institute, Fall 2000).

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The Conservation Potential

Great potential for water conservation and innovative water management exists in the Columbia and Snake Basins—indeed, statewide. This potential exists across the board, for all major water users including irrigators, municipalities, and industry alike. By assessing and implementing current cost-effective conservation, and by shifting to technologically feasible and innovative conservation in the future, we can create new sources of supply and avoid placing further reliance on our over-appropriated streams, rivers and aquifers.

To provide just a few examples of cost-effective conservation techniques: (1) irrigators could use best irrigation practices to realize greater irrigation efficiencies—switching to drip irrigation, for example; (2) industries could start reusing water; and (3) municipalities could find greater efficiencies by updating their systems to reduce lost-or-unaccounted-for water. To begin the process of shifting towards conservation, for example, municipalities would need to complete comprehensive conservation potential assessments, with the goal of using conserved water as a new source of supply.

The City of Seattle completed a Conservation Potential Assessment in 1998, noting that, historically, “water supply planning and development has followed a predictable path of tapping a single large water source every 30-50 years to meet growth in regional water demand. Today reliance on any single option to meet future demand is an increasingly high-risk gamble due to environmental, political, and demographic uncertainties.”⁵⁸ The results of Seattle’s conservation assessment were encouraging: cost-effective conservation can realize savings of “up to 31 million gallons per day (mgd) or 16% of water use in the peak season...over the next 20 years with no reduction in customer’s ability to use water nor in their satisfaction with water services.”⁵⁹ Implementing technologically feasible conservation nets an additional savings of 12 mgd—for a total of 43 mgd saved over the next 20 years.⁶⁰

Into the Future

This leap away from further water extraction and towards fundamental changes in supply and demand management advances a vital idealistic shift in managing water use overall. Current water law and management in Washington is witness to the continued allocation of water to people, without preservation of a resource base for fish and wildlife. If we ensure satisfaction of the natural resource base *first*, we can then implement more innovative ways of managing and using water, allowing for a high quality of life while simultaneously preserving the natural environment fundamental to our identity.

Nature envelops mankind, and even stating that water must be reserved for “people and fish” separates one entity into incomprehensible parts. CELP believes that by satisfying the needs of nature, we satisfy our own needs. A balance exists to everything in this world, and we have been given both the intelligence and the ability to preserve this balance.

Let’s do just that.

⁵⁸Water Conservation Potential Assessment: Final Report (Seattle Public Utilities, 1998).

⁵⁹*Id.* at 1, 4.

⁶⁰*Id.*

APPENDIX A

The following list includes all permits listed as “Columbia River permits” in Ecology’s water rights tracking system. Permits with proofs of appropriation filed were not included. Consequently, the permits included in the list below are those for which the permittee has yet to fully perfect their water right.

It is important to note that some of the permittees listed below have yet to even begun or complete the construction necessary to fully perfect. As is evident, some of these rights were also granted nearly 40 years ago and many are well beyond their expected completion date.

Columbia River Permits⁶¹

CONTROL #	APPLICANT	CFS	AFY	priority	expected
21138(F)	Cox	12.80	3264	1973	1999
21138(H)	Wyatt	0.48	121	1973	2001
21138(J)	Smith	1.01	255	1973	1999
21138(N)	Northwest Farm Credit	0.66	170	1973	1999
21138(T)	Perkins	0.42	106.3	1973	1994
21138(U)	Smith	0.25	63.8	1973	1999
21138(Z)	Orozco	0.08	21.3	1973	1999
21138(ZA)	West	0.25	63.8	1973	1999
21139(A)	Johns Farm Ltd.	12.01	3098.3	1973	1996
21139(B)	Gopher Broke Orchard	0.57	144.5	1973	1996
21139(G)	Wells	3.03	773.5	1973	1993
21139(L)	Fugachee Orchards	0.83	212.5	1973	1999
21139(N)	Orozco	0.73	187	1973	1999
13134	WA DNR & K 2 H Farms	27.00	4540	1962	1995
14583	Stimson Lane Ltd	66.80	13200	1966	2000
15042(A)	Stimson Lane Ltd	85.90	17180	1967	2000
15855	WA DNR & K 2 H Farms	3.00	1010	1968	1995
16312(A)	WA DNR & K 2 H Farms	242.00	46475	1970	1995
16571(A)	WA DNR & K 2 H Farms	587.76	112052.8	1971	1995
16571(D)	Watts	20.88	3982	1971	1994
16638(A)	WA DNR & K 2 H Farms	12.81	2743.3	1966	1995
25639(A)	WA DNR Laukers	112.58	27110.5	1977	1996
25639(B)	Watts Brothers Farm	19.05	4589	1977	1999
25639(C)	Winemakers LLC	7.89	1899	1977	1998
25639(D)	Watts	32.86	7912	1977	1999
25639(E)	Watts	32.86	7912	1977	1999
25639(F)	Winemakers LLC	9.15	2204	1977	1998

⁶¹Permit information gained from Ecology.

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25639(G)	Nichols	27.87	6709.1	1977	1997
25639(H)	Beightol	9.36	2254.9	1977	1998
25639(I)	Mercer	30.89	7437.3	1977	2001
25639(N)	Columbia Ridge Orchard	7.89	1899	1977	1998
25639(P)	Mercer	18.41	4432	1977	1998
25639(S)	Mercer Ranches Inc	7.89	1899	1977	1996
25639(Z)	Mt. Adams Orchard	1.96	474.7	1977	2001
27335	Poirier	2.67	48	1981	1994
27518	Kennewick Port	10.00	3600	1981	1999
27890(A)	Chapman	0.53	96	1982	1995
27890(B)	R I F Dev. Co.	1.25	224	1982	1995
28168	Giles	1.30	260	1983	2000
28169	Giles	1.30	260	1983	2000
28500(A)	Gebbers Farms Inc	0.86	152	1984	1994
28683(A)	Homeland Fruit Co.	0.02	10	1985	1994
28881(B)	USARMY COE/Maryhill	0.44	24	1980	1995
28998(A)	John Hancock Mutual	3.50	942.4	1986	2003
28998(B)	Desert Hills Fruits	3.20	868	1986	2003
29870	Gebbers Farms Inc	3.78	800	1988	1999
29876	W N Orchards Nickell	7.80	1621.9	1988	1998
29942	Drinkwater	2.00	356	1989	1999
29971	Orozco	0.20	44	1989	1996
30053(A)	Mercer Ranches Inc	27.59	4943.4	1989	2000
30053(B)	McBride Hereford Ranch	1.96	320	1989	1996
30053(G)	Rocha	0.12	29.4	1989	1999
30053(I)	McBride	0.25	40	1989	1999
30053(J)	Meek	0.12	20	1989	1999
30053(N)	Mercer	0.25	58.9	1989	1999
30053(O)	Columbia Ridge Orchard	0.91	217.9	1989	1999
30053(P)	John Hancock Mutual	8.70	1424.8	1989	2000
30070	WA PARKS Chief Joseph	2.58	576	1989	1998
30124	Canoe Ridge Vineyard	2.20	742.5	1989	1996
30151	Wick	4.53	1200	1990	1998
30199	Stemilt Irrigation Dist.	6.70	1250	1990	1996
30205	Pariseau	11.10	2088	1990	2000
30217	Curry	0.23	40	1990	1997
30289	Stimson Lane Ltd	5.00	1540	1980	2003
30322	P & G Orchards	0.60	112.8	1990	1997
30388	Gebbers Farms Inc	5.70	1245.2	1990	1994
30389	Wick	5.70	1245.2	1990	1995
30391	Wick	3.40	900	1990	1996
30486	Zimmerman	0.09	14.8	1990	1996
30487	Zimmerman	0.17	25.4	1990	1997
30488	Zimmerman	0.09	14.3	1990	1996
30489	Zimmerman	0.23	39.2	1990	1996

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30490	Zimmerman	0.07	10.2	1990	1996
30491	Zimmerman	0.11	18.7	1990	1996
30492	Zimmerman	0.12	21.4	1990	1996
30493	Zimmerman	0.06	9.1	1990	1996
30494	Zimmerman	0.13	21.2	1990	1996
30589	Hansen	1.82	361	1991	1994
30634	Sandpiper Farms Inc.	34.00	4500	1991	1996
30728	Badger Mountain Irr.	25.00	5160	1991	2002
30738	Richerson	0.15	26.6	1991	1995
30791	Kopak Jr.	0.02	1	1991	1995
30834	Berg	13.37	2850	1991	1997
30847	Gebbers Farms Inc	1.99	495.8	1991	1997
30952	Pariseau	15.28	2617	1991	1997
30983	Gebbers Farms Inc	0.71	161	1991	1997
30997	Naumes Inc. Hunter	11.14	1385	1991	2000
30998	WA DNR & P & G Orchard	0.86	172	1991	1997

**TOTAL: 1630 cubic feet per second (cfs)
331,601 acre-feet per year (afy)**

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Appendix B

APPENDIX B

The following list includes surface water applications from the Columbia River and ground water applications determined to be in significant hydraulic continuity with the river. This list does not include the Snake River. Also, the list may not be complete. The Columbia River moratorium was lifted in 1997 and recent applications may not have been designated in the same fashion after the moratorium was lifted. Even when the moratorium was in place, it is possible that not all groundwater applications in significant hydraulic continuity with the river were identified as such and designated in the proper database – a gap exists in priority dates of groundwater applications from 1995 to 1999, for example.

Pending Columbia River Applications⁶²

SURFACE APP # (S4-#)	APPLICANT	AMOUNT REQUESTED (CFS)
26814	Chelan Cty PUD	16
29956	Lower Stemilt Irrig.	2.45
30052	Mercer Ranches Inc.	0.02
30185	Richland City Myers	12.6
30465	Kennewick Irrig.	82
30584	Kennewick Public Hospital	49.5
30976	Quad Cities	178
31083	Lower Stemilt Irrig.	4.66
31106	Scheib	1.78
31110	Roper	0.07
31117	Metropolitan Life Ins.	1
31133	Douglas County PUD 1	0.07
31134	Douglas County PUD 1	0.33
31137	McBride Hereford Ranch	17.11
31148	Mercer Ranches Inc.	0.45
31174	Cooper	0.1
31175	Cooper	0.12
31197	Rains	0.16
31249	Shaw	0.06
31262	Moody	0.11
31263	Kessenich	0.11
31291	Ford	0.02
31319	Creveling	19.2
31365	Schlunegar Brothers	53.57
31366	Schlunegar Brothers	17.86
31424	Sinclair	0.16

⁶²Application information gained from Ecology. Please note that these lists may not be complete due to Ecology's tracking methods. Figures thus represent the minimum of water requested.

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31460	Pariseau	15.6
31462	Magnussen	0.02
31481	Kennewick Irrig.	18
31536	Pariseau	2.67
31623	Kopak Jr.	0.5
31711	WA DNR & Clyde Bybee	8.89
31712	WA DNR Laukers	2.33
31714	Crane	3.56
31789	Crane	3.56
31806	Munn	2.33
31815	R I F Dev. Co.	0.41
31848	McBride Hereford Ranch	14.67
31867	Apple Mngt Co.	0.5
31870	West	11.5
31905	Harris Farms Inc.	12.3
31936	Nelson	0.28
32074	Reeves Brothers Orchard	1.5
32190	Miller	2.23
32336	Douglas County PUD 1	0.11
32367	Wenatchee Heights Re.	11.5
32392	Crane	4.46
32393	Crane	3.56
32394	Crane	4.45
32398	Crane	4.46
32399	Crane	2.67
32400	Crane	4.01
32401	Crane	3.56
32420	Douglas County PUD 1	0.11
32421	Douglas County PUD 1	0.09
32548	Crane	0.44
32577	WA DNR Laukers	3.9
32622	WA DNR Buchholtz	10.7
32678	Mercer	24.5
32682	McLean	3.79
32744	Newman	0.08
32774	Munn	131
32803	Columbia Gas Storage	0.89
32804	Mercer Ranches Inc.	1.5
32838	Priest Co. Inc. Priest	29.6
32900	Gebbers Farms, Inc.	7.13
32917	Columbia Gas Storage	8.9
32927	Bybee	8.35
32928	Hartley	4.9

TOTAL AMOUNT OF SURFACE WATER REQUESTED = 833.02 cfs or 373,884 gpm

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<u>GROUND APP #</u> (G4-#)	<u>APPLICANT</u>	<u>AMOUNT (GPM)</u>
31089	Gunkel	600
31098	Shore Properties Inc.	5650
31138	McBride Hereford Ranch	7680
31186	Auvil Fruit Co. Inc.	3000
31210	Hale	89
31247	Chelan County PUD	600
31269	Boesel Construction	30
31374	Troutman Ranches	2000
31375	Troutman Ranches	800
31399	Nickell Orchards	200
31412	Davis	600
31516	Stansfield	150
31517	Sinclair	20
31518	Sinclair	25
31524	Orondo Orchards Inc.	690
31526	Benson	175
31574	Ross	290
31583	Malaga Water Dist.	1500
31621	Goodman	171
31690	Kain	80
31715	Davis	200
31721	Davis	250
31725	Brewster City	650
31742	Sundale Orchards Inc.	750
31753	Madden	100
31763	WA Parks Maryhill St.	900
31764	WA Parks Maryhill St.	100
31776	K B Alloys Inc.	75
31793	Auvil Fruit Co. Inc.	3850
31813	H P Montgomery Trust	2000
31832	Pateros City Parks	500
31858	Tiedeman	10
31859	Miller	315
31871	West	3500
31882	Knowles	30
32097	R I F Dev. Co.	920
32098	R I F Dev. Co.	20
32099	R I F Dev. Co.	50
32100	R I F Dev. Co.	330
32391	Crane & Crane Inc.	25
32839	Priest Co. Inc. Priest	455
32841	Priest Co. Inc. Priest	3653

TOTAL AMOUNT OF GROUNDWATER REQUESTED = 95.89 cfs or 43,033 gpm

TOTAL AMOUNT OF WATER REQUESTED (surface and ground) = 928.9 cfs or 416,917 gpm

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FOR IMMEDIATE RELEASE March 14, 2001

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Governor Gary Locke

OUR
GOVERNOR

Office of Governor Gary Locke
FOR IMMEDIATE RELEASE - March 14, 2001

Contact: Governor's Communications Office, 360-902-4136
Alt Contact: Mary Getchell, Department of Ecology, 360-407-6157

OUR FIRST
LADY

Locke announces statewide drought emergency

SERVING
WASHINGTON

ALDER LAKE - The state of Washington can survive its worst drought in at least a quarter-century if neighbors help their neighbors, Gov. Gary Locke said today as he authorized the Department of Ecology to declare a statewide drought emergency.

THE
NEWSROOM

He added swift passage of his proposed legislation to bring Washington's archaic water laws into the 21st century also would provide important new tools to fight the drought.

FYI
WASHINGTON

Locke noted that the state's snow pack is at just 50 to 60 percent of average for this time of year, which will sharply reduce the amount of runoff into streams this summer. In fact, the flow in the Columbia River for April through September is expected to be less than 57 percent of average.

PUBLIC
SCHEDULE

Just yesterday, more than 30 rivers in Washington experienced record low flows - all but one of which is in Western Washington. For example, the daily flow in the Columbia River at The Dalles was 42 percent of average; the Cowlitz River, 37 percent of average; the Skagit River at Mt. Vernon, 44 percent; and the Wenatchee River, 35 percent.

SEARCH

"This already is the worst drought in our state since 1977, and it's only March," said Locke. "We'll probably beat that record soon."

CONTACT

To illustrate how low water levels already are, Locke and other state officials announced the drought emergency from the shores of Alder Lake in eastern Pierce County - a shoreline that is widening as the water level falls rapidly.

HOME

"For anyone who thinks a major drought cannot happen in the Evergreen State, this drought is real and the effects are going to be real," said Locke. "We are facing an extraordinary situation that demands the full attention and cooperation of all citizens."

"We will need neighbors to share with their neighbors. If a city or a farmer has water that they can do without, then please consider loaning or leasing it to a city or farmer who doesn't have enough," said Locke. "Working together, we can keep our fish swimming, our farmers in business, and our citizens from going thirsty."

The emergency declaration immediately activates several tools the Department of Ecology can use to ease the effects of the drought: emergency water permits, temporary transfers of water rights and financial assistance.

Ecology Director Tom Fitzsimmons said his agency probably will grant few, if any, emergency water permits because there simply is no additional water to allocate in many parts of the state. Rather, he expects that temporary transfers of water rights will be the most-commonly used tool this year.

Ecology is using money from a special drought account to add staff to quickly process requests for water-right transfers. The transfers could be used to keep water in streams for fish, to provide water to communities that don't have enough water for their businesses and residences, or to help keep farm crops from dying.

To help determine where transfers are most needed, the Department of Fish and Wildlife is identifying where fish will be at greatest risk from the drought.

Also, the Department of Agriculture and the Conservation Commission will help match up farmers who have excess water with those who need water to save their crops. This "match-making" will be especially important for people who have interruptible water rights that may be cut off this summer because of low flows in the streams from which they draw their water.

The drought account currently contains \$5.1 million, which Locke said will be spent to purchase or lease water rights to keep rivers and streams from drying up; to make agricultural irrigation systems use water more efficiently; and to help cities and towns keep water flowing to businesses and homes.

The Governor's Office is working with the state's congressional delegation and the National Marine Fisheries Service to obtain federal money to expand this program.

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Other state agencies also are taking immediate steps to address the drought.

The Department of Health is surveying local water utilities to determine whether they anticipate water shortages this summer.

The Department of Natural Resources is advising forest residents about how to protect their property from forest fires. The Office of Community Development is examining its many grant programs to determine whether additional money is available to ease the effects of the drought on businesses and communities. The Department of Ecology will step up its efforts to prevent illegal water use.

"These actions and this money will not take away all the pain or restore our normal water supply - the problem is too severe for that," Locke said. "We will minimize the pain as much as possible, but everyone needs to help by using water wisely and efficiently."

Related Links:

- Drought Declared in Washington
- Forest Fire Prevention
- Northwest River Forecast Center
- Water Supply Forecasts
- Natural Resources Conservation Daily Snow-Precipitation Update
- Washington Current Streamflow Conditions

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River watch: Is Columbia tapped out?

By Mike Stark

Thursday, November 16, 2000

In a move to help imperiled salmon runs, a Seattle-based environmental group says Washington state should stop allowing water to be diverted from the Columbia River.

The Center for Environmental Law and Policy and other conservation groups on Wednesday petitioned the state's Department of Ecology, asking the agency to put a moratorium on new water withdrawals from the river.

If the state denies the request, a lawsuit is a possibility, according to Kristie Carevich, an attorney with the group.

The issue of flow and water rights continues to be a contentious one in the Pacific Northwest. For the past four years, flow rates have dipped below federal targets in the Columbia and Snake rivers, where more than a dozen salmon and steelhead species are listed on the federal Endangered Species Act.

Those targets are meant to estimate how much water is needed to push salmon toward the ocean. Slower water means temperatures in the river can rise, water quality suffers and young salmon have a tougher time migrating, Carevich said.

Meanwhile, Washington is under increasing pressure to allow more water to be diverted from the Columbia. There are about 400 applications pending for water appropriations, including many for eastern Washington farmers looking to irrigate their crops, according to the department.

Adding to the mix are lawsuits filed in late October by cities and irrigators in eastern Washington to speed up the processing of water rights applications.

The Department of Ecology closed the Columbia and the Snake to new water withdrawals in 1992 to study whether the river could support new water uses. The department hasn't completed its studies, but the state legislature in 1997 told state officials to start processing water requests again.

Carevich said it's a mistake to allow more water to be taken from the Columbia, especially at a time when British Columbia, Idaho and the federal Bureau of Reclamation are making efforts to return water to give endangered salmon a boost.

"It just doesn't make any sense," she said, adding that Washington is also funding measures to improve stream flows. "Yet it's about to go against that."

In a letter to Tom Fitzsimmons, the ecology department's director, the group said that further water appropriations would have the state "pushing these species closer to extinction and ignoring its responsibilities as a steward of Washington's water resources."

They say that the federal Fish Passage Center, created by the Northwest Power Planning Council to monitor fish counts and water flows on the Columbia and Snake, has documented a direct correlation between higher flows and salmon survival.

But Mary Getchell, a spokeswoman for the ecology department, said there are uncertainties in linking salmon survival with river flows.

"We absolutely believe that water that's cool and clean is necessary for the survival of

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salmon," she said. "But as far as in-stream flow, the science is unsettled on the Columbia River ... Those are very scientific policy issues that the Department of Ecology is wrestling with."

Carevich countered that the claim of uncertainty a delay tactic. "That dispute was created by a lot of people that want to hold off a decision." Getchell said the department will review the petition and then decide, with consultation from the legislature, whether to start a rule-making process to implement a moratorium. If so, it could take one or two years to come up with a final decision, she said.

The conservation groups, though, are calling for an immediate halt to water appropriations on the Columbia. A new report from the Center for Environmental Law and Policy, entitled "Columbia River Vision," says there simply isn't enough water in the Columbia and its tributaries to meet "fish-critical needs."

"This petition should be a wake-up call to those claiming that the Columbia Basin salmon can be recovered without significant change," said Rob Masonis of American Rivers, one of the groups that filed Wednesday's petition. "We should focus on identifying solutions to the challenges we face, such as improving water use efficiency and finding alternative means of providing the economic benefits of the lower Snake River dams."

Other groups filing the petition were Friends of the Earth and WaterWatch of Oregon.

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Group seeks Columbia water-rights limits

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TRI-COUNTY ENDANGERED SPECIES ACT RESPONSE

Group seeks Columbia water-rights limits

The Washington Ecology Department is considering requests from four cities for more access

By Nicholas K. Geranios of The Associated Press
11/13/00

A Seattle-based environmental group is demanding that the state Department of Ecology allow no more water to be removed from the Columbia River system.

The great river of the West does not contain enough water to sustain endangered salmon runs, and demands for additional water rights should be rejected, according to the Center for Environmental Law & Policy.

The center will file a petition with the department this week asking that the agency fight lawsuits that demand more water.

"We're telling them that under the law, they cannot permit more water use," said Kristie E. Carevich, an attorney for the center.

A lawsuit was filed last month against the department by the city of Pasco and the Columbia-Snake River Irrigators Association. They want the state to accelerate the granting of new water rights.

The department has not seen the environmental group's petition and cannot comment, spokeswoman Mary Getchell said.

Getchell said the department would have to consult with the Legislature before enacting another moratorium on Columbia water.

In 1997, the Legislature told the department to start processing Columbia River water requests, which had been on hold since the early 1990s to help federally protected Snake River salmon.

The agency has not issued new water right decisions in central Washington.

This summer, the department appeared ready to approve a request by the cities of Kennewick, Pasco, Richland and West Richland for enough water to satisfy 50 years of growth.

The Center for Environmental Law & Policy challenged that request, and the state moved the case to the back of a long line. That was criticized as a way for the state to avoid making a precedent-setting decision.

The four cities contend their request would have lowered the water level of the Columbia by just 1 inch.

"Were the Ecology Department to justify approving any of the 100-plus requests based on an assertion that each water extraction in itself will have only a small effect on river flow, water use could be permitted right to the point where the river runs dry," The Center for Environmental Law & Policy said in a report released this month.

The report contends the department does not have a good estimate on how much Columbia River water is actually used by rights holders and cannot accurately measure the effect of future diversions.

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It is known that substantially more water could be removed from the river under existing permits that aren't being fully utilized, the group said.

The possible removal of four Snake River dams to help salmon will not do enough for fish, the report said.

"Whether the dams are ultimately removed or remain in place, successful salmon recovery depends upon a sufficient quantity of water being available to flow down the Columbia and Snake rivers," it said.

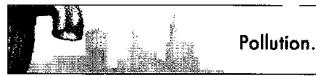
Irrigation water removed from the river often is eventually returned loaded with farm chemicals, silt and other hazards to wildlife, the report said.

"Water quantity problems affect water temperatures, smolt travel time, and sedimentation rates -- key parameters that greatly impact salmon survival and recovery," it said.

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Washington farmers lease water rights to help fish - 7/17/2001 - ENN.com

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Washington farmers lease water rights to help fish

Tuesday, July 17, 2001
By Environmental News Network

Mike and Kelly Moeur of Ellensburg, Washington and Robert and Shirley Stewart, who own property in Ellensburg, are leasing their water rights to the Washington State Department of Ecology to keep the water in streams for fish.

Much of the state experienced the driest winter in 71 years, prompting Governor Gary Locke to declare a drought emergency on March 14 that is still in effect.

Water flows are less than half of the average for this time of year in three of the state's major rivers including the Yakima River which runs through Ellensburg in central Washington. This year, the Yakima River will have only 44 percent of its average flow, officials predict. The rest of the state's largest rivers will have between 50 and 70 percent of their average flows.

For the past 30 years, the Moeurs grew timothy hay on their farm. This year, they have chosen not to withdraw water. Instead, they signed a temporary lease to keep approximately 408 acre-feet, or 13.2 million gallons, of water in Spring Creek and the Yakima River. The state Department of Ecology is leasing the water from the Moeurs for \$52,500.

For the past 25 years, the Stewarts also grew hay and pasture and raised cattle. Ecology will pay the Stewarts \$30,000 to keep approximately 232 acre-feet, or 7.6 million gallons, of water in the Yakima River this year.

Their water leases to the state were made possible by the first water law revisions in 30 years. The state has made water rights processing more flexible so water is available where it is needed most.

Two lines for water-right applications have been created -- one for new rights and one for changing or transferring existing water rights. This allows faster action on change or transfer requests that have been long stuck in line behind requests for new water rights.

Family farms in rural areas are allowed to temporarily transfer their rights to other uses, helping others during the drought.

A tax incentive to conserve and re-use water was created. In addition, the taxes

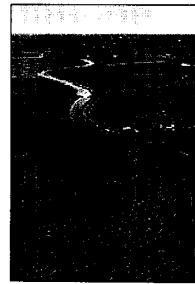
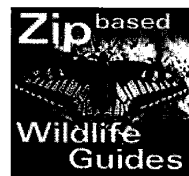


Photo by Brian Priesner
Courtesy U.S. Dept. of Agriculture
Aerial view of apple and pear orchards near Yakima, Washington.

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paid-by-utilities that conserve or reuse water go into the special fund to lease and buy water rights for endangered fish.

Talk Back
Let us know what you think about this story in ENN's Forum Discussion Area.

"We should celebrate our collective success in securing long-needed water policy changes for people, farms and fish," Locke said. "It also should mark our collaborative, bipartisan commitment to move forward."

As a result, the Department of Ecology has \$3.5 million in state funds and authority to spend up to \$6 million in federal funds to purchase or lease water rights. People or businesses interested in donating, selling or leasing their water rights should contact Ecology's drought hotline at 800- 468-0261.

"We are so pleased that the Moeurs and Stewarts joined our efforts to help fish survive this year," said Ecology Director Tom Fitzsimmons. "Thanks to them and other people who are coming forward to offer their assistance, our fish populations have a better chance of making it through this incredibly difficult drought year."

Both fish and farmers are having a tough time this year. Farmers, who rely on about 75 percent of the water used in the state, are facing crop losses due to lack of water. Several runs of salmon and steelhead, already having a hard time surviving, are at even greater risk with low stream flows.

Governor Locke has made requests of U.S. Agriculture Secretary Ann Veneman to designate 13 Washington counties agricultural disaster areas due to devastating crop damage from June storms, and to declare six counties agriculture disasters as a result of drought. These designations would provide emergency low-interest Farm Service Agency loans to farmers and ranchers.

The July forecast by the National Weather Service indicates that the amount of water in several major Washington rivers will be significantly less than predicted in June.

The agency predicted that, from April through September, the amount of water in those rivers would be at least 40,000 acre-feet, or 13 billion gallons, less than the amount forecasted in June.

For the Columbia River, the region's largest, the estimated amount of water is down by one million acre-feet between the June and July forecasts.

"If the forecasts prove accurate, this is significantly less water than we were hoping would be in the rivers," said Doug McChesney, who coordinates the drought response for the Department of Ecology. "This forecast indicates that we may have serious low flow problems during the driest months, when water is needed both to irrigate crops and help fish migrate."

State officials are asking Washington residents to water their lawns every other day or let them go brown. Make sure water goes onto the intended plants and grasses, not sidewalks or driveways, officials advise.

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Natural gas pipeline shut down

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SEATTLE POST-INTELLIGENCER
http://seattlepi.nwsource.com/local/153387_pipeline20.html

Natural gas pipeline shut down

Second rupture in eight months was too much for regulators

Saturday, December 20, 2003

By ROBERT MCCLURE
SEATTLE POST-INTELLIGENCER REPORTER

Safety regulators yesterday ordered the shutdown of a major high-pressure natural-gas pipeline serving Western Washington after it ruptured twice in eight months.

Williams Northwest Pipeline Corp. must inspect and replace portions of the half-century-old pipe, which runs from the Columbia River to Canada, roughly paralleling Interstate 5. The inspections and repairs must be finished within three years in the most populated areas, including Seattle and Bellingham, and be completed all along the 268-mile route within a decade.

Inspectors were taken aback that the most recent rupture occurred even though they had ordered a 20 percent pressure reduction following the first incident.

"It's pretty significant," said Kim West, senior pipeline engineer for the state Utilities and Transportation Commission. "Never has there been a pipeline have another incident after the pressure has been reduced."

The initial break occurred May 1 near Lake Tapps in Pierce County, causing the evacuation of about 30 homes, a grocery store and an elementary school.

Tests later showed that the metal had corroded under the stress of gas pressure.

Tests are not yet complete on the section of pipe that ruptured last Saturday in southern Lewis County between Longview and Chehalis. But a dark stain there "is indicative of corrosion," said the shutdown order by the U.S. Office of Pipeline Safety.

At least twice during the 1990s, leaks along the pipeline's route in Washington were attributed to corrosion. The pipeline in Oregon experienced 22 failures near Oregon City in 1994 under similar circumstances, the shutdown order said.

The shutdown is highly unlikely to affect delivery of natural gas because of other pipelines in the state, according to Williams, a natural gas transportation and production company that transports 80 percent of Washington's natural gas.

Williams also must inspect its other two major transmission lines, one running alongside the pipeline in question and the other a large spur that runs to Goldendale in Klickitat County.

"With two incidents in succession on the same section of pipe, needless to say, we're concerned and that's why we're going to do an inspection," said Williams spokeswoman Bev Chipman.

The break in the line near Lake Tapps caused a booming sound and the one last week caused a loud hiss, but in neither case did the escaping gas explode. That has happened in the past because of land movement and construction accidents, causing huge fireballs.

Chipman said that since the rupture at Lake Tapps in May, "We've been inspecting it pretty aggressively" and that the company had voluntarily idled the line by the time the shutdown order was made yesterday.

Damon Hill, a spokesman for the Office of Pipeline Safety, said the expensive replacement of pipeline won't be required in sections where the company can demonstrate through integrity tests that it isn't needed.

"We're not asking them to replace every inch of the pipeline," he said.

The shutdown takes on more gravity considering that Williams is the same company behind a proposed pipeline from Cherry Point near Bellingham to Vancouver Island, said activist Fred Felleman, whose environmental group Fuel Safe Washington is pursuing a legal challenge to the project.

Natural gas pipeline shut down

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The gas line would start near important herring-spawning beds at Cherry Point and traverse waters frequented by orcas and other marine mammals near the San Juan Islands.

"This is a corporate-mentality indication of their approach to safety -- fix it when it breaks," Felleman said. "It's not the kind of corporate mentality we want putting a line through the heart of the killer whale habitat."

"To me, their promises that they'll do good in their next project don't hold water," Felleman said.

Chipman responded: "We have done numerous environmental impact statements on both the Canadian side the United States side. They all show it would have no impact on the environment. ... We spend millions of dollars on integrity management. It's our number one priority."

The worst pipeline disaster in Washington occurred in 1999 in Bellingham. It involved a pipeline carrying liquid gasoline, not natural gas. Some 237,000 gallons leaked into Whatcom Creek and exploded, killing two boys and a young man.

P-I reporter Robert McClure can be reached at 206-448-8092 or robertmcclure@seattlepi.com

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Final Approval
Waste Treatment Plant
July 8, 2002

7. The United States Department of Energy has elected to take a federally enforceable limit on the number of hours 5 steam generating boilers, 4 hot water boilers, a diesel fire pump and 6 emergency diesel generators will operate each year.
8. The project will result in a potential to emit up to 156.9 tons of NO_x per year.
9. A caustic scrubber has been determined to be Best Available Control Technology (BACT) for the control of NO_x emissions from the pre treatment facilities.
10. Selective Catalytic Reduction (SCR) has been determined to be BACT for the control of NO_x emissions from the LAW vitrification plant.
11. SCR has been determined to be BACT for the control of NO_x emissions from the HLW vitrification plant.
12. Low NO_x burners plus flue gas recirculation has been determined to be BACT for the control of NO_x emissions from the steam and hot water plant.
13. Reduced operation and an on-road diesel fuel with a maximum sulfur content of 0.05% has been determined to be BACT for the control of NO_x emissions from the emergency generators.
14. Reduced operation and an on-road diesel fuel with a maximum sulfur content of 0.05% has been determined to be BACT for the control of NO_x emissions from the diesel fire pump.
15. The project is located in an area that has been designated Class II for the purposes of PSD evaluation. The nearest Class I Areas are identified in Table 1 below:

Class I Area	Distance
Alpine Lakes Wilderness Area	85 mi. (137 km)
Goat Rocks Wilderness Area	88 mi (142 km)
Mt. Adams Wilderness Area	95 mi (153 km)
Mt. Rainier National Park	95 mi (153 km)
Eagle Cap Wilderness Area	115 mi (185 km)

Table 1

16. The project is located in an area that is currently designated in attainment for all national air quality standards and all state air quality standards.
17. The ambient impacts of the proposed increase in emissions were determined with the EPA's Industrial Source Complex Short-Term Model Version 3 (ISCST3).

PSD Permit
Boise Cascade Wallula
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3. The proposed modifications to the RF3 and HFB are subject to the following New Source Performance Standards (NSPS) in Title 40 of CFR, Part 60 (40 CFR 60):
 - (a) The RF3 is subject to Subpart BB of 40 CFR 60 for Total Reduced Sulfur (TRS).
 - (b) The HFB is subject to Subpart Db of 40 CFR 60 for Oxides of Nitrogen (NO_x) and is subject to Subpart D for Sulfur Dioxide (SO₂).
4. Boise plans to replace the slaker with a new and more effective unit, resulting in an emissions reduction; the evaporators will have no direct emissions to the environment. Since neither the slaker nor the evaporators will cause any emissions increases, the changes do not trigger New Source Review (NSR) requirements or additional NSPS applicability. The slaker emissions reduction has not been relied upon in the issuance of the permit.
5. Boise submitted a PSD application to Ecology for the proposed project on August 29, 2001. After receipt of additional materials in 2001 dated September 28; October 5; November 5, 16, 21, 26, 27, and 30; December 12; and in 2002 on January 23 and February 1, 5, and 6, the application was determined to be complete on February 12, 2002.
6. Changes in emissions resulting from the proposed modifications and estimated emissions from the modified and affected units at the mill, upon completion of the proposed modifications, are presented in Table A below. The proposed modifications are expected to result in increased emissions of Carbon Monoxide (CO), NO_x, Volatile Organic Compounds (VOCs), TRS, and PM₁₀ in quantities greater than the significant emission rates (SER) specified in 40 CFR 52.21(b)(23)(i) and WAC 173-400-113(1)(d) for Prevention of Significant Deterioration (PSD) and WAC 173-400-112(1)(d) for nonattainment NSR. Consequently, with the exception of PM₁₀, the project must undergo review pursuant to 40 CFR 52.21 and WAC 173-400-110 for each of the above criteria pollutants. PM₁₀ emissions are addressed under a separate state regulatory order, to be issued concurrently with this order.

Table A Emissions Increases ¹			
Pollutant	Past Actual Emissions (Most recent two years actual emissions – 1999-2000) (tons per year)	Future Potential Emissions (tons per year)	Net Change in Emissions for PSD Applicability (tons per year)
NO _x (nitrogen oxides)	1059	1717	658
CO (carbon monoxide)	604	2847	2244

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Table A Emissions Increases ¹			
Pollutant	Past Actual Emissions (Most recent two years actual emissions-- 1999-2000) (tons per year)	Future Potential Emissions (tons per year)	Net Change in Emissions for PSD Applicability (tons per year)
SO ₂ (sulfur dioxide)	1869	1869	0
VOC (volatile organic compounds)	990	1261	272
TRS (total reduced sulfur)	14.4	32	17.4

¹ Emissions increases presented in Table A are from those emission units that have been modified or affected as a result of this project.

- The VOC emissions increases are contributed by the associated emission units in the pulping and washing operation. The modified units do not contribute to any VOC emissions increases.
- Best available control technology (BACT) is required for any individual emissions unit that contributes to the emissions increase subject to PSD permitting and that will be modified as part of the proposed project. BACT will be used to control NO_x, CO, and TRS from the RF3; and NO_x, CO, and SO₂ from the HFB. The BACT limit for SO₂ emissions from the HFB is found in the accompanying state regulatory order; BACT limits for NO_x, CO, and TRS are contained in this order.
- The proposed pollutant increases resulting from the project will not significantly impact air quality attainment under state or NAAQS:
 - The proposed modification will not cause or contribute to pollutant levels in excess of state or NAAQS.
 - The proposed modification will not cause or contribute to air quality pollutant levels above PSD increment thresholds in 40 CFR 52.21(c).
- Dispersion models used for evaluating the ambient air quality impacts were AERMOD and ISC-PRIME for nearby ambient air quality impacts and the CalPUFF/CalMET system for distant, Class 1 area impacts. None of these models are EPA guideline models, but have been determined to provide superior performance to the equivalent models approved for use by EPA in 40 CFR 51, Appendix W.

Central Area (concluded)

Ozone

1-Hour Ozone for 1998 (ppm)

Station	Location	1-Hour Maximums					
		1 st High Date	Conc.	2 nd High Date	Conc.	2 nd Day High * Date	Conc.
2000001A	Wishram, Columbia River Gorge	8/4	.079	8/4	.078	7/27	.077

* 2nd Day High – Second day with the highest 1-hour average.

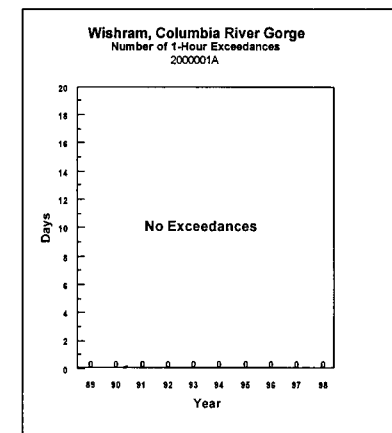
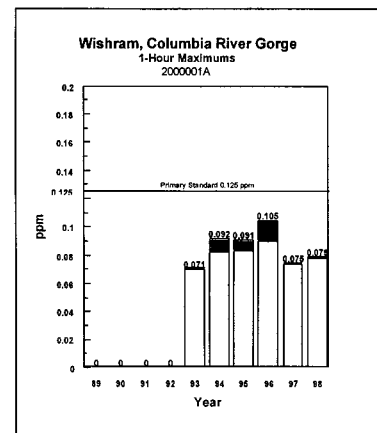
8-Hour Ozone for 1998 (ppm)

Station	Location	8-Hour Maximums			
		1 st High Conc.	Date	4 th High Conc.	Date
2000001A	Wishram, Columbia River Gorge	.076	8/3	.063	7/26

Ozone for 1998

Station	Location	Period of Record	# Hours	# Days	% Valid Data
2000001A	Wishram, Columbia River Gorge	Apr-Oct	4516	188	88

Ozone



Letter 10 Exhibits

Central Area

Ozone

Ozone (ppm) for 1997 (8-Hour)

Station	Location	8-Hour Maximums			
		1st High			4th High
Station	Location	Conc	Date	Conc	Date
2000001A	Wishram, Columbia River Gorge	0.062	5/12	0.058	8/12

Ozone (ppm) for 1997 (1-Hour)

Station	Location	1st High		1-Hour Maximums 2nd High		2nd Day High*		# Hrs >.124	Exceedance Days
		Conc	Date	Conc	Date	Conc	Date		
2000001A	Wishram, Columbia River Gorge	.075	5/19	.074	8/14	.074	8/14	0	0

*2nd Day High - Second day with the highest 1-hour average.

Ozone for 1997

Station	Location	Period of Record	# Hours	# Days	% Valid Data
2000001A	Wishram, Columbia River Gorge	Apr-Oct	5,090	214	99